

THE
TREATMENT OF ERYSIPELAS
BY THE
MURIATED TINCTURE OF IRON.

CHARLES BELL, M.D., F.R.C.P.E., ETC.

Reprinted from the Edinburgh Medical Journal for August 1876.

EDINBURGH: OLIVER AND BOYD, TWEEDDALE COURT.

MDCCCLXXVI.

THE TREATMENT OF ERYSIPelas BY THE MURIATED TINCTURE OF IRON.

IT has been stated by one of high authority, that it was his belief "that a member of a university should watch the current opinions on the subject he teaches, and endeavour to check the wrong bias which fashion or accident are continually giving to medical studies, to the neglect of sound doctrine and approved authorities."¹ If this is a special duty of Professors, it is one which ought to be exercised with great discrimination and sound judgment; otherwise, from their high position, and the influence they naturally acquire over the minds of their students, they may become the means of checking important discoveries, and valuable suggestions for the treatment of disease, by which the advance of science may be interrupted, human suffering needlessly prolonged, and mortality obviously increased. Every suggestion which has for its object the relief of human suffering should be thoroughly investigated, and not condemned merely because it is new, and not quite in accordance with existing practice, which has been too often founded on erroneous views of the cause and pathology of disease. The necessity for and propriety of these introductory remarks have been forcibly impressed on me by the perusal of the recently published opinions of the Professor of Surgery in our University, who, in his lectures on surgery, has, without due consideration—as it appears to me—ventured to express most erroneous views regarding the curative effects of the muriated tincture of iron in erysipelas.

Having paid particular attention to the subject of erysipelas, and having had the satisfaction of laying before the profession the treatment of the idiopathic form of the disease by the muriated tincture of iron, suggested and long successfully practised by my brother George Hamilton Bell, and which I have proved is equally beneficial in every other form of the disease—it need not be wondered at if I should avail myself of the opportunity afforded

¹ Practical Essays, by Sir Charles Bell.

me by Professor Spencer, of not merely controverting what I consider to be very narrow, if not altogether erroneous, opinion on a subject of great practical importance, but to seek to vindicate the position I was led many years ago to take up in the matter. The primary views I have hitherto advocated as to the nature and sources of erysipelas may be briefly stated thus:—In whatever form erysipelas may appear, it is the effect of blood-poisoning from improper diet, and exposure to impure air; and, although in some instances it is apparently the consequence of infection, it may in reality be produced by those affected being exposed to the same vitiated source, and also by there being a peculiar idiosyncrasy in certain families which induces several members to be affected at the same time, yet not residing constantly in the same locality. There is also reason to suspect that, after exposure to the exciting cause, the disease may lie dormant in the system until stimulated into action by some irritation or excitement, or even by some depressing circumstance. In several of these respects it resembles diphtheria and scarlatina, as well as puerperal fever; but more especially in the fact that all these diseases yield to the same mode of treatment.

It may not be uninteresting to refer to some circumstances which seem to illustrate and confirm these views. That erysipelas is the result of exposure to a vitiated atmosphere is, I think, rendered obvious by the following cases reported by the late Dr Begbie, senior, who relates that a locality in the New Town of Edinburgh became vitiated by the effluvia arising from putrid animal and vegetable matter in the shops on the ground floor and sunk flat, and that in one of the houses above, entering from a cross street, all the inmates became sickly, and the man-servant was seized with a severe form of erysipelas. He was treated according to the practice then in vogue, and his "convalescence was slow and unsatisfactory, so that four or five weeks elapsed before the patient was able to resume his duties."

The family removed to another house, where the air was pure, and they soon all recovered their health, with the exception of the nurse, who became affected in a few days after the removal with erysipelas of a most inveterate character, thus showing that the disease must have been dormant in the system.

The wife of one of the shopmen in the vitiated locality referred to, "who was in the daily habit of attending her husband's place of business, and assisting him in conducting it, was, during the progress of the first of these cases of erysipelas, carried home in the pains of childbirth, and died on the fourth day after delivery, with obscure indications of puerperal peritonitis, and rapid sinking." In this case we have an example of the same vitiated atmosphere, giving rise to two apparently different diseases, erysipelas and puerperal fever.

The following cases give a striking example of the idiosyncrasy

which exists in some families to have several members affected at the same time. The village of the Water of Leith, celebrated for its unhealthiness from its visit of cholera, fever, and other epidemics, and where the Board of Education have chosen to erect one of their largest educational establishments, was visited by erysipelas. Two sisters, living under the same roof, apparently caught the disease from different sources, having resided apart from each other for some time, the one occupying their present dwelling, the other residing with a gentleman in a distant part of the town. At the opposite side of the same lane a man became affected, although he had no communication with the sisters; and, in succession, other three cases occurred in the same household. Thus showing that different people exposed to the same polluted atmosphere, although not having intercourse with each other, are liable to become affected with the same disease.

Dr Begbie relates another case which still further illustrates the view under consideration: "Mr B., of full habit, became affected with erysipelas, and after a tedious illness made a good recovery under the treatment of the tinetur of the muriate of iron. His brother, residing in a distant part of the country, with whom he had maintained no intercourse for many years, was attacked with the disease at the same time."¹

The following cases go to prove that similar results may occur in regard to diphtheria and scarlatina: Some years ago I was requested to attend a family occupying a large and apparently well-aired house in England. I found the youngest child, a delicate girl, was suffering from diphtheria. The head-nurse soon became affected, then the under-nurse, and in a short time eight of the family were laid up with the disease; but they all made a good recovery under the treatment of tinetur of the muriate of iron. On inquiry, I ascertained that the drains were in good order, but the back-windows overlooked a large grass field, which had been recently "top-dressed," and the smell coming from it was most offensive. The disease appeared partially in the neighbourhood, and scarlatina became very general.

I was called a short time ago to see a family occupying a baronial residence in Argyllshire, situated on the banks of a loch, into which the sewage flowed. Seven of the family were first attacked with scarlatina, and, on recovery from it, two were seized with diphtheria of a severe character—the one case was followed by paralysis, the other by abscesses implicating the glands of the neck. The lady of the house escaped the fever, but she became affected with diphtheria and was very nervous; the disease was checked, however, by the tinetur of the muriate of iron. The whole family made a good recovery. On examination, I found that the modern part of the mansion communicated with the older portion by means of a long

¹ Contributions to Practical Medicine.

passage, from which, especially at night, there came an offensive smell.

I am persuaded that crysipelas is most frequently the result of exposure to impure air—and in this respect it resembles the other diseases I have referred to, in all of which there is obvious blood-poisoning. If this be so, it is clear that the treatment should consist of the means which is calculated to remove the poison most rapidly from the system, and counteract its effects, without reducing the powers of life. With this view, after many years' experience, and considerable opportunities of judging, I confidently recommend the treatment with the muriated tincture of iron. I should not have thought it necessary to have repeated this opinion, having expressed it strongly in a previous paper, had I not observed in Professor Spence's recently published lectures, that he advocates the anti-phlogistic treatment practised thirty years ago; at the same time, he not only underrates the value of iron, but condemns it altogether in some cases. In example of this he says, "When the disease assumes an acute character, and is accompanied with a quick, full pulse, or in erysipelas of the head, when there is a tendency to violent delirium, iron should not be given." But the truth is, that, had he watched its effects, and understood its influence on the constitution, he would have discovered that the cases referred to are those in which the treatment by the tincture of the muriate of iron is the most immediately beneficial. In proof of this I cannot do better than quote the case of the nurse referred to in the former extract from Dr Begbie's work. He informs us that she was a fine healthy woman approaching the age of fifty. "She was seized with symptoms of acute illness, commencing with violent headache, flushed face, severe pain in the lumbar region, great febrile excitement, and high delirium. With these symptoms the erysipelatous rash appeared on the right ear, and quickly spread over the same side of the face in the course of the night. The aspect of the case at this early stage indicated a severe and lengthened illness; indeed, I do not remember to have seen for a long time one which, from the constitutional disturbance and local symptoms, threatened a more unfavourable issue." "Seeing that the case was of a severe character, I hesitated placing reliance on iron alone, and directed the abstraction of twelve ounces of blood from the nape of the neck by cupping, and the administration of a full dose of castor-oil. These means being premised, and having observed that the urine passed in the course of the day—the second of the illness—was of a red colour, and scanty in quantity, that it was loaded with biliary matter, and presented, under the microscope, numerous blood-corpuses, and many crystals of the triple phosphates, I ordered the muriated tincture in manner recommended by Mr Bell, in doses of twenty drops every two hours, continued through the night and day. At the end of twenty-four hours there was a marked remission in all the more prominent symptoms; the crysipelas was arrested; the headache

subdued ; the delirium overcome ; the pulse reduced in frequency and force ; the skin covered with a gentle moisture, and bereft of its burning heat ; the pain in the back removed ; and the urine rendered more copious, and freed from most of the blood and bile of the previous day. The remedy was continued for twenty-four hours longer ; and without experiencing any unpleasant effects, the patient was convalescent at the end of the fourth day, presenting a striking contrast to the case of her fellow-servant, who, with symptoms of a less severe character, suffered from illness during many weeks."¹ Dr George W. Balfour, who is not a likely person to take an erroneous impression on any subject, says, "I have treated all my cases, upwards of twenty years, with iron, and have had no cause to regret my doing so. On the contrary, erysipelas is one of the few diseases for which I now believe we have a certain and unfailing remedy, and this whether it is infantile or adult, idiopathic or traumatic."²

These cases fully corroborate what I stated in my former paper ; and had the Professor of Surgery made himself better acquainted with the literature of the subject, he would have hesitated before expressing himself so decidedly against the use of the iron, and would not have asserted that it should be given "only at intervals,"—and scarcely have ventured on the statement, that, "by some, iron is considered a specific in all forms of the disease, but my experience warrants me in saying that the impression is erroneous,"—without producing some proof beyond mere assertion.

It would be extremely interesting to know what Mr Spence's experience in this matter really amounts to, and I hope I may be excused in asking if he ever administered the tincture of the muriate of iron in the manner I have recommended ? I put the question, because the Professor's unsupported rejection of this remedy recalls to my remembrance an expression of his predecessor in the chair, Professor Miller, who remarked to me soon after the publication of my first paper : "Your treatment of erysipelas is all nonsense." I asked him if he had ever tried it ? When he candidly admitted he had not. I then recommended him, as I should now do to Mr Spence, to try it in the Infirmary, where he had an ample opportunity of watching its effects. I met him some months after, when he, with his usual cordial manner, said, "You are quite right ; I have found your treatment of erysipelas to be excellent."

I am still further induced to question if Professor Spence has ever given the treatment which I have advocated a fair trial, from his recommending, in such cases as he thinks iron may be beneficial, that "it should be given in moderate doses, say from 15 to 20 minims of the tincture of the perchloride four or five times

¹ *Op. cit.*, p. 218.

² Notes on Practice, Monthly Medical Journal for 1853, vol. i.

a day." Such doses, even of the tincture of the muriate of iron, although they may be beneficial in the milder forms, are not sufficient to overcome the more severe and virulent attacks of the disease. The remedy must be given in the full quantity and frequency which I have recommended in order to produce its beneficial effect in the severer forms of the disease; and if he or any one expects to accomplish this desirable object by the use of the tincture of the perchloride of iron, either in erysipelas or any of the other diseases referred to in this paper, they will be disappointed, as such is the result of my experience both in erysipelas and diphtheria. Two illustrations may here suffice. I hold that a material difference exists between the effects of the two so-called similar preparations of iron—viz., the muriate and perchloride—both of which I have fully tested, and could give many instances of their marked therapeutic difference. In regard to erysipelas, I was attending a lady who was severely affected by it after a tedious attack of rheumatic fever. I ordered her to have thirty drops of the tincture of the muriate of iron every two hours; but, to my great disappointment, I found that she went on day after day without any improvement. I then asked to see the medicine she was taking, when I discovered it was the tincture of the perchloride, sent by mistake by the chemist. I immediately changed the medicine for the tincture of the muriate of iron, and in a few days the disease disappeared.

I was requested a short time ago to attend a young lady suffering under a severe attack of diphtheria. She had been taking for some time the tincture of the perchloride of iron, with little apparent benefit, as her pulse was 110, and her throat covered with diphtheritic membrane. She was put on the tincture of the muriate of iron, and had her throat swabbed with a solution of Condy's fluid several times a day. The membranous deposit rapidly disappeared, and the pulse in two days fell to 80, and in the course of a week she was quite convalescent.

In conclusion, I have again to state, in regard to the treatment of erysipelas with the tincture of the muriate of iron, that I have the most perfect reliance on it; and that when it has failed, the fault has been not in the remedy, but in the mode of administering it. I hold that no one is justified in condemning it until they have given it as I have recommended, and found it fail in effecting a cure in uncomplicated cases. Of course, I admit there are cases complicated with other virulent diseases, in which no human aid can be of any avail; or it may not have been had recourse to until after the system has fairly succumbed to the disease. Such cases must form exceptions. In short, if any remedy is entitled to be called a specific, it is so; at all events, as much so as quinine is in ague.

My desire on the present occasion is not merely to correct what I consider to be a serious error on the part of one of our ablest Professors, whose eminence as a surgeon gives weight to his opinion;

but to repeat my conviction in favour of the treatment of erysipelas by the muriated tincture of iron, which my increased experience justifies my doing; and, consequently, in opposing the obsolete and positively hazardous practice advocated by Professor Spence—a circumstance which his own observation seems to have made him in some degree aware of; as he says, “Before leaving this subject, I would repeat the caution that, during convalescence from an attack of erysipelas, great care should be taken. The circulation is always impaired during the progress of the disease, and continues so in many cases throughout a long period of convalescence. This state is sometimes attended with a risk of fatal syncope.”¹ These symptoms are just what might be expected to result from bleeding, emetics, and saline aperients combined with mercurials in such a disease as erysipelas.

¹ *Op. cit.* p. 77.

